

1 **20.** (currently amended) The method set forth in claim ~~25~~32 wherein:
 2 the step of making a the lay-up includes the steps of:
 3 wrapping each tube in the joint with a first carbon fiber fabric that is impregnated with the
 4 matrix material, the ends of the fabric extending beyond the tube;
 5 wrapping the ends of the carbon fiber fabric that is wrapped around a given tube around the
 6 tube the given tube joins to;
 7 wrapping the entire joint in a second carbon fiber fabric whose fibers have an orientation
 8 different from that of the fibers in the first carbon fiber fabric.

1 **21.** (canceled)

1 **22.** (canceled)

1 **23.** (original) The method set forth in claim 20 wherein:
 2 the step of wrapping the entire joint is done such that all seams in the second carbon fiber
 3 fabric are at the top and bottom of the tubes and the second carbon fiber fabric is overlapped at the
 4 seams.

1 **24.** (canceled)

25. (currently amended) A method of making a lug for a joint that joins carbon fiber tubes in a bicycle frame,

the method employing a ~~el~~osable mold that ~~may be closed around the tubes~~ has surfaces which fit with each other and with the tubes when the mold is closed around the tubes to form a closed cavity that contains the tubes at the joint and the method comprising the steps of:

making a lay-up for the lug of at least carbon fibers and a matrix material around the tubes at the joint, ~~the lay-up forming a continuous wrap around the tubes and being enclosed by the closed mold;~~

~~including an expandable element that is also enclosed by the closed mold;~~

closing the mold around the lay-up, the tubes at the joint, and ~~the~~ an expandable element, the lay-up and the expandable element being completely contained within the closed cavity; and

applying heat from a source outside the cavity to the closed mold to ~~curing~~ cure the lay-up ~~while the mold is closed, the cure of the layup~~ heat causing expansion of the expandable element and the expansion compacting the ~~enclosed~~ lay-up against the tubes such that voids in the lug are prevented.

26. (canceled)

27. (currently amended) the method set forth in claim 25 wherein:

the distance between the ~~inner~~ surface of ~~the mold~~ closed cavity and a tube being joined decreases as the distance from the joint increases, whereby the lug tapers towards the tube.

28. (currently amended) The method set forth in claim 25 wherein:

~~the step of including the expandable element is performed by lining the mold with~~ expandable element is a silicone lining on the cavity's surface.

29. (currently amended) The method set forth in claim 25 wherein:

2 ~~the step of including the expandable element is performed by including a layer~~
 3 ~~of expandable element is~~ expandable syntactic foam in the lay-up, the syntactic foam
 4 having an expansion rate which is substantially greater than the lay-up's expansion rate.

1 **30.** (currently amended) The method set forth in claim 20 wherein:

2 ~~the step of including the expandable element is performed by~~
 3 ~~including the expandable element is~~ a layer of expandable syntactic foam in the
 4 lay-up, the syntactic foam having an expansion rate which is substantially greater than the
 5 lay-up's expansion rate.

1 **31.** (previously presented) The method set forth in claim 30 wherein:

2 the layer of expandable syntactic foam is included in the lay-up before the step of
 3 wrapping the entire joint in a second carbon fiber fabric.

1 **32.** (new) The method set forth in claim 25 wherein:

2 in the step of making the lay-up for the lug, the lay-up conforms substantially to
 3 the tubes' surfaces at the joint.